

STATE OF ALASKA

THE REGULATORY COMMISSION OF ALASKA

Before Commissioners:

Mark K. Johnson, Chair
Kate Giard
Dave Harbour
James S. Strandberg
G. Nanette Thompson

In the Matter of the Petition by GCI)
COMMUNICATIONS CORP. d/b/a GENERAL)
COMMUNICATION, INC., and d/b/a GCI for)
Arbitration under Section 252 of the)
Telecommunications Act of 1996 with the)
MUNICIPALITY OF ANCHORAGE d/b/a)
ANCHORAGE TELEPHONE UTILITY a/k/a ATU)
TELECOMMUNICATIONS for the Purpose of)
Instituting Local Exchange Competition)

U-96-89

PREFILED DIRECT TESTIMONY OF DAVID C. BLESSING
ON BEHALF OF ACS OF ANCHORAGE

Qualifications and Experience

1. Q. Please state your name and business address.

A. My name is David C. Blessing. I am a principal in the consulting firm of
Parrish, Blessing & Associates, Inc. My business address is 10905 Fort
Washington Road, Suite 307, Fort Washington, Maryland, 20744.

1 2. Q. Please describe your professional background.

2
3 A. I hold a Bachelor of Arts degree from Kalamazoo College and a Masters
4 of Arts degree in Economics from Fordham University. In addition, I
5 have successfully completed all required course work and
6 comprehensive exams for my doctorate in economics. My background
7 also includes an appointment to the faculty of Nazareth College of
8 Rochester, where I taught courses in economics and finance. I have also
9 held the position of senior economist at Rochester Telephone Company.
10 I have represented small and midsize telephone companies in a number
11 of regulatory proceedings before the Federal Communications
12 Commission (FCC) and State regulatory commissions in Alaska,
13 Georgia, Missouri, Nebraska, New York, Ohio Pennsylvania, Texas, and
14 Puerto Rico.
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20 I have prepared and presented testimony concerning incentive
21 regulation; interconnection pricing, development, and policy;
22 productivity and indexing methodologies; and rate development and
23 design. I have also presented and defended analyses and testimony
24 before regulatory commissions and government officials in the United
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1 States and abroad. I have spoken at a number of industry forums on
2 various subjects related to regulatory policy and reform. A detailed
3 summary of my background is included as Exhibit DCB-1, which is
4 attached.
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8 Purpose of Testimony

9 3. Q. What is the purpose of your testimony?

10 A. The purpose of my testimony is to support the model platform and inputs
11 proposed by ACS in this proceeding and to demonstrate that the current
12 UNE loop rate in Anchorage of \$14.92 is too low and is not consistent
13 with the intent of the Telecommunications Act of 1996 and the FCC
14 rules designed to implement the Act. I will show that a UNE loop rate of
15 \$25.88 is reflective of the true forward-looking cost that is in turn
16 reflective of the market realities in Anchorage. In this testimony, I will
17 show that GCI's current market share, existing customer relationships,
18 financial strength, and anticipated ability to provide both telephone and
19 cable service off of the same facilities lead to the inescapable conclusion
20 that the current UNE loop rate in Anchorage is not consistent with a
21 stable, competitive marketplace. As part of this discussion, I also will
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1 show that the current loop rate is much lower than what it would cost
2 either ACS or GCI to provision loops using the currently available most
3 efficient technology.
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5 **4. Q. Throughout this proceeding, ACS has claimed that the UNE loop**
6 **rate is too low, while GCI has been equally adamant that the rate is**
7 **already too high. What is the basic standard that should be applied**
8 **to determine proper UNE rates?**
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10 **A.** The Commission should apply the forward-looking Total Element Long
11 Run Incremental Cost (TELRIC) standard, which was adopted by the
12 FCC in 1996. In adopting that standard, the FCC's goal was to "expedite
13 the development of fair and efficient competition"¹ by establishing a
14 pricing standard that would send the correct investment signals to
15 potential market competitors.
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18 Section of 251 of the Telecommunications Act requires incumbent local
19 exchange carriers (ILECs) to interconnect with any and all competitors.
20 By imposing that obligation, Congress eliminated the legal barrier to
21 competition in local phone service. However, an economic barrier to
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26 ¹ Local Competition Order, 11 FCC Rcd , at ¶ 618.

1 competitive entry remained, namely the high level of capital required to
2 establish a competitive local exchange network. The FCC's forward-
3 looking TELRIC standard was designed to remove that barrier.
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6 Forward-looking costs – what it would cost to assemble the capital
7 assets, materials, and labor necessary to begin offering service –
8 represent the linchpin to the entry decision of a new competitor. If the
9 competitor's forward-looking costs of providing service are less than
10 prices in the market, the competitor is likely to enter the market. If not,
11 the competitor will not enter. Thus, the FCC reasoned that the
12 competitor's actions are based on the relationship between market prices
13 and forward-looking costs, and not on the relationship between prices
14 and the incumbent's embedded costs.² The FCC did not select the
15 forward-looking TELRIC pricing methodology because it is an efficient
16 estimator of the ILEC's actual costs, but rather because it would provide
17 a jump-start to the development of local competition.
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26 ² Id., at ¶ 620.

1 The FCC's decision to require that UNE prices be based on forward-
2 looking cost allowed competitors to enter the market at the cost they
3 would have incurred if they built their own facilities, but without having
4 to generate the capital necessary to duplicate the ILEC's entire network.
5 Competitors could enter the market with no facilities of their own, or
6 could slowly add their own facilities over time and purchase their
7 remaining network function requirements from the incumbent. This
8 ability to transition to facilities-based competition provided a
9 tremendous stimulus to the pace of competitive development by
10 eliminating the major financial barrier to entry into the local exchange
11 market.
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17 5. Q. Based on the above discussion, what is the appropriate UNE rate
18 level?
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20 A. Based on the FCC's analysis found in the Local Competition Order, the
21 appropriate UNE rate is equal to what it would cost the incumbent or a
22 new entrant to build an entirely new network using the most efficient
23 currently available technology. Thus the appropriate UNE price, all else
24 being equal, should be set where the competitor is indifferent between
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1 building their own facilities and leasing UNEs from the incumbent.
2 Because of data availability concerns and the assumption that the
3 incumbent is generally larger and better able to exploit economies of
4 scale, the general practice has been to use the forward-looking costs of
5 the incumbent to estimate UNE prices.
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10 6. Q. Please describe a methodology that would estimate the appropriate
11 UNE rate level.

12 A. The standard methodology is to develop a TELRIC model, populate it
13 with forward-looking investment, expense, and demand inputs, and run
14 the model.³ The major problem with this approach is that there is no
15 way to ever verify a TELRIC estimate since TELRIC models a
16 hypothetical network that does not and never will exist. For this reason,
17 UNE proceedings are characterized by the competitive carrier (the
18 CLEC) producing a UNE rate estimate that is much lower than that
19 produced by the incumbent.
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26 ³ A TELRIC model is a form of a traditional long run incremental cost (LRIC) model.

1 The present case involving ACS and GCI is no different. For over four
2 years, the parties have been debating the relative merits of models and
3 inputs. GCI's estimated forward-looking cost for building a new
4 network in Anchorage has been as low as \$10 per line. ACS, on the
5 other hand, using the same type of forward-looking model, estimates the
6 forward-looking UNE loop rate at about \$25.
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10 Unfortunately, it has proven very difficult to definitively answer the
11 question of what is the appropriate UNE rate level simply by examining
12 the models and the proposed inputs. It is clear that other factors must be
13 considered in order to determine the appropriate UNE loop rate level.
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18 **7. Q. How would you propose that the Commission reach a decision**
19 **concerning the appropriate UNE loop rate in Anchorage?**

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21 **A.** In addition to considering the proposed models and inputs, I would
22 propose that the Commission also consider the following factors:

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24 1) The actual cost of provisioning new loops by GCI. GCI is
25 a firm with size and financial resources equal to or greater than those of
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1 ACS, is in the same geographic market, possesses similar buying power,
2 deals with the same outside plant construction contractors as ACS, faces
3 the same labor market as ACS, and provisions plant under the same
4 environmental conditions. This means that GCI's costs to provision new
5 plant should be in line with those of ACS.⁴ Since the appropriate UNE
6 rate is equal to the level where a competitor is indifferent between
7 building its own facilities and leasing them from the incumbent, the
8 appropriate UNE rate level should be consistent with GCI's cost to
9 provision loop plant. Using data provided by GCI, it can be shown that
10 GCI's costs of constructing new loop plant actually exceeds the costs
11 predicted by the ACS 7.2 TELRIC model. This means that the current
12 UNE rate of \$14.92 is significantly below what it actually costs GCI to
13 build loop plant today.
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19 2) ACS has approximately 188,000 loops in service in
20 Anchorage today. GCI is leasing over 58,000 (or 30%) of these loops
21 with more added each month. This level of competitive penetration
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24 ⁴ GCI apparently agrees that its costs should be line with those of ACS, and therefore, that it is
25 possible to use ACS's costs to estimate those of GCI. On May 5, 2003, Rick Hitz of GCI filed an
26 affidavit in support of GCI's filing in the federal Universal Service proceeding. In footnote 1 of his
affidavit, Mr. Hitz stated: "[I]n a previous declaration, I had estimated GCI's additional loop costs as

1 should allow GCI to begin building out its own facilities. The fact that it
2 has not done so suggests the current UNE rate is much lower than GCI's
3 cost of building traditional fiber/copper loop plant. It would be an
4 understandable business decision for GCI to attempt to exploit a
5 favorable UNE loop rate for as long as possible.
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8 3) The potential harm to public interest is much greater if the
9 UNE rate is too low than it is if the UNE rate is too high. If the UNE
10 rate is set in excess of the appropriate level, the CLEC will be induced to
11 build its own facilities. The building of alternative facilities by a
12 financially viable and established competitor is considered by most
13 industry observers to be necessary for the realization of the benefits of
14 competition.
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17 4) On the other hand, a UNE loop rate set well below the
18 appropriate level will have a significant negative impact on the public
19 interest. If the current UNE loop rate is continued, ACS's ability to act
20 as viable competitor will erode to the point that no market constraint will
21 exist to control GCI's behavior in the local market. It should not be
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26 at least \$9.37 per loop more than the ACS unbundled loop rate. That estimate had used ACS's tariffed
transport rates to estimate GCI's costs."

1 expected that Anchorage will enjoy the benefits of a stable, competitive
2 market for local telephony. Instead, we will be left with an unregulated
3 dominant carrier in the Anchorage market. ACS' recent debt restructure
4 provides evidence to the view of the financial markets of the overall risk
5 faced by the company. In a period of historically low interest rates, ACS
6 was required to pay an aggregate yield of approximately 10.5% on its
7 debt. It will be shown below that the inappropriately low UNE rate has
8 been a major factor in the level of risk attributed to the company.
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12 5) The major arguments used by most CLECS against
13 increasing UNE rates are that higher rates represent a barrier to market
14 entry and that the incumbent's ability to exploit its market dominance is
15 expanded with a higher UNE rate. In the case of GCI in Anchorage,
16 these arguments simply are not credible. Given GCI's relative financial
17 strength, its vertical and horizontal integration between local, data, long
18 distance and cable, and the fact that GCI has achieved about a 44% retail
19 market share in less than six years, any barrier to entry concerns are
20 simply unfounded. The barrier to entry argument is even less plausible
21 in this case given that it generally assumes that the incumbent still retains
22 market power and/or dominance. Given its market share loss and other
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1 criteria established by the FCC and described below, ACS cannot be
2 considered a dominant carrier in Anchorage and should not be regulated
3 as one.
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5 6) As will be shown below, the inappropriately low UNE loop
6 rate has allowed GCI to gain an economic windfall that has allowed it to
7 finance its investment in cable telephony. This uneconomic gain, all
8 derived from an inappropriately low UNE loop rate, will result in GCI
9 possessing an uneconomic competitive advantage not just over ACS in
10 the local market, but also over competitors in the long distance, data, and
11 cable markets. While it would appear that GCI's plans to introduce
12 facilities-based competition through the deployment of an alternative
13 technology are exactly the result Congress, the FCC, and the RCA
14 intended, I will demonstrate that the low UNE rate has in fact financed
15 this investment for GCI. GCI's announced cable telephony roll-out
16 schedule means that 60,000 loops will leave the ACS Anchorage
17 network over the next three years. This roll-out will have significant
18 impacts on ACS, further degrading its financial health. The Commission
19 should reflect the cable telephony roll-out through shortened depreciation
20 lives and through increased costs of debt and equity that reflect increased
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1 financial and business risk and the demand used to determine the UNE
2 rate. ACS's proposed UNE loop rate of \$25.88 reflects this demand loss.
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6 8. Q. What additional topics will be discussed in your testimony?

7 A. My testimony will also show that the ACS 7.2 model with the inputs
8 proposed by ACS is appropriate to estimate the forward-looking cost of
9 providing loops in Anchorage. ACS 7.2 yields an estimate that is
10 consistent with results from the FCC's universal service model when
11 populated with the same inputs, and in fact, underestimates costs as
12 evidenced by GCI's actual provisioning cost experience. I will also
13 describe the development of ACS's cost of capital inputs and its
14 wholesale discount percentage.
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20 The ACS 7.2 TELRIC Model and Proposed Inputs

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22 9. Q. What UNE loop rate is ACS proposing in this proceeding?

23 A. ACS is proposing a UNE loop rate of \$25.88. This result is based on the
24 ACS 7.2 model simulation for 21 Anchorage Census Block Groups
25 (CBGs) and ACS's proposed inputs. The average loop cost of the 21
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1 sampled CBGs is then extrapolated to the remaining CBGs using a linear
2 regression methodology to yield the Anchorage study area-wide
3 estimated forward-looking loop cost of \$23.86.⁵ This rate is then
4 adjusted upward to \$25.88 to reflect the demand loss resulting from the
5 migration of customers from the ACS network to GCI's cable telephony
6 network. A complete description of this sampling and extrapolation
7 process is set forth in Exhibit DCB-1.
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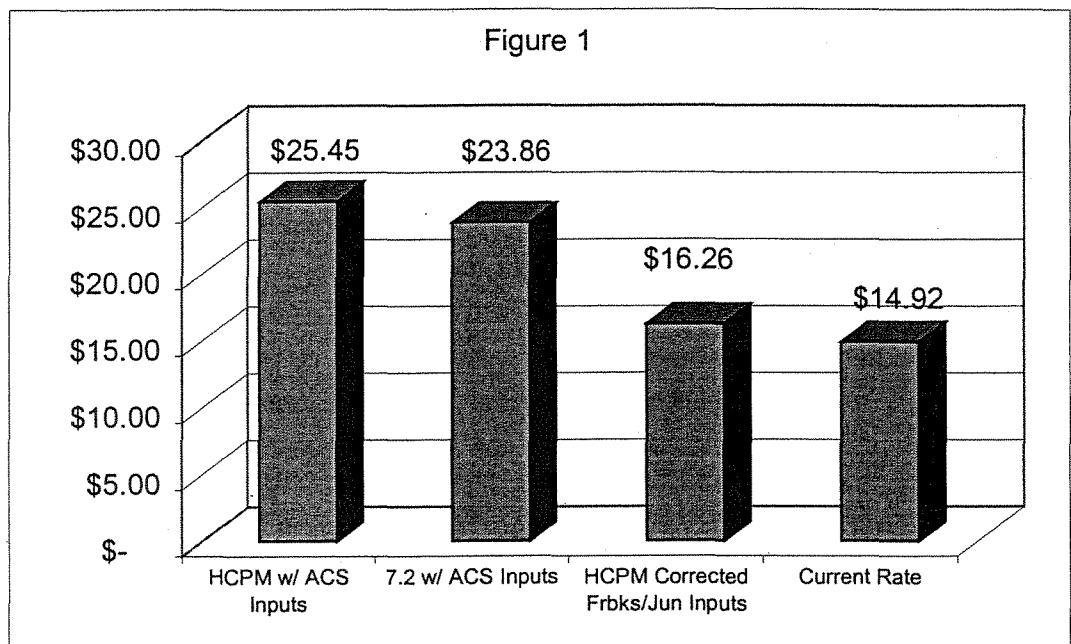
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12 **10. Q. Has the Commission ruled that the ACS 7.2 TELRIC model is**
13 **compliant with the FCC's rules?**
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15 **A.** Yes. The Commission ruled in Order Number U-96-89(26), dated July
16 29, 2002, that the ACS 7.2 model is compliant with the FCC's rules.
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20 **11. Q. Would the UNE loop rate estimated by the ACS 7.2 model and the**
21 **ACS proposed inputs be consistent with a loop rate estimate derived**
22 **from the FCC's HCPM model?**
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26 ⁵ The 21 CBGs used in the ACS 7.2 simulated network contain over 28,000 loops. This represents approximately 15% of all loops in Anchorage.

A. Yes. As shown in Figure 1 below, the UNE loop rate estimated using the FCC's HCPM model and the ACS proposed inputs is \$25.45. The rate is very close that derived from the 7.2 model using the same inputs (without making adjustments for reductions in demand due to the loss of customers to GCI's cable telephony network). The Figure also shows just how inconsistent the current rate of \$14.92 is relative to the results using HCPM and ACS 7.2 in conjunction with the ACS inputs.



1 12. Q. What conclusion can you draw from the fact that the loop rate
2 estimated by the HCPM model is so similar to the loop rate
3 estimated by the ACS 7.2 model?
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5 A. The fact that both models produce similar results when populated with
6 the same inputs shows that the real issue here is not the model platform,
7 but rather the inputs. In addition, it illustrates that GCI's repeated claims
8 that ACS 7.2 contains numerous network design problems are not valid
9 (unless of course similar problems with the FCC's HCPM model cause
10 the same distortion to results). Therefore, I would advise the
11 Commission to concentrate its efforts on inputs rather than model
12 platform.
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18 13. Q. Please describe the inputs proposed by ACS?
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20 A. The ACS 7.2 model inputs proposed by ACS are based on the current
21 costs of provisioning loop plant in Anchorage. They include the vendor
22 prices for materials, as well as the contract prices and internal loaded
23 labor rates for outside and internal labor. Following FCC requirements,
24 overhead costs, maintenance costs, depreciation rates, and the cost of
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1 capital are developed and included in the model. Since they represent
2 the current cost of installing loop using the currently available most
3 efficient technology, they are compliant with the FCC's TELRIC pricing
4 standards. Other ACS witnesses discuss most of these inputs, with the
5 exception of the cost of capital. The estimation of the cost of capital
6 inputs is described below.
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11 Evaluation of Estimated Model Results
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13 14. Q. In response to the previous question, you stated that ACS's proposed
14 inputs are compliant with the FCC's TELRIC pricing guidelines.
15 GCI will also propose inputs that are significantly different from
16 those proposed by ACS and yet claim that they too are TELRIC
17 compliant. How do you reconcile this disagreement?
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19 A. As discussed above, one of the major problems with the TELRIC
20 standard is that it is dependent on the simulated building of a
21 hypothetical network. The hypothetical network, and therefore, the costs
22 of that network, do not actually exist. As a result, there is no way to
23 validate a TELRIC study's results. The inability to verify the model
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1 results, coupled with the complexity of the models and the sheer volume
2 of the inputs, makes it very easy to get lost in the details of the model
3 and input submissions of both parties. As a result, I would advise that
4 the Commission evaluate the model and inputs based on the end result
5 and not the other way around. That is, the Commission should consider
6 whether \$10 per loop is a reasonable estimate for the cost of provisioning
7 a loop using the best technology currently available. If it is not, then the
8 model and inputs used to derive the \$10 estimate cannot be considered
9 reasonable.
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15 **15. Q. How should the Commission determine whether a \$10 loop rate is a**
16 **reasonable estimate?**

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18 **A.** The most effective method would be to compare the results of the
19 models and inputs with what it actually costs ACS or GCI to build loop
20 facilities today in Anchorage. Recall that the FCC's intent behind the
21 TELRIC standards is to send the correct investment signals to potential
22 market entrants.⁶ The FCC reasoned that hypothetical forward-looking
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26 ⁶ Local Competition Order, 11 FCC Rcd at 15813 ("New entrants should make their decisions whether to purchase unbundled elements or to build their own facilities based on the relative economic

1 costs — what it theoretically would cost an efficient incumbent or
2 competitor to build a new network — represent the linchpin to the entry
3 decision of a new competitor. If a given competitor's hypothetical
4 forward-looking costs are less than current market prices, then that
5 competitor is likely to enter the market.
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9 If the UNE rate is less than the cost to build their own facilities,
10 competitors will lease UNEs. It is important to remember that the
11 purpose of UNE rates is not to provide a windfall to a competitor through
12 an inappropriately low UNE rate, but rather to eliminate the financial
13 barrier to entry. Conversely, if the UNE rate is greater than today's cost
14 to build, competitors will build. Thus, one test of whether the UNE rate
15 is set at the appropriate level is whether it is consistent with what it
16 would take today for an efficient competitor to build loops.
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22 **16. Q. Can such comparisons be made?**
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25 costs of these options"), 15844 ("We believe that the prices that potential entrants pay for these
26 [unbundled] elements should reflect forward-looking economic costs in order to encourage efficient
levels of investment and entry").

1 A. Yes. The model results can be compared to the actual construction costs
2
3 recently incurred by GCI, and the comparison demonstrates that the
4 UNE loop rate estimates produced by the ACS 7.2 model using the ACS
5 inputs do not overstate the cost of actually deploying loop plant today.
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8 The use of the current construction experience of a carrier is consistent
9 with the FCC's practice of using the current costs of building facilities
10 using the most efficient currently available technology. Since GCI is
11 similar in size and financial resources to ACS, and since we can assume
12 that GCI is an efficient carrier that attempts to minimize construction
13 costs while using the best technology available to build a portion of its
14 network, the actual investment incurred by GCI should be a good proxy
15 for the minimum forward-looking investment required by ACS to build
16 such facilities in Anchorage.
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20 As set forth in the prefiled testimony of ACS witness William J. Wilks,
21 GCI's actual per line investment for its recent construction of
22 distribution and concentrator facilities in the Aurora Subdivision in
23 Anchorage significantly exceeds the per line investment produced by the
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1 ACS 7.2 model for that same subdivision. Mr. Wilks demonstrates that
2 GCI's actual costs also exceed the investment predicted by the HCPM
3 model for the Aurora Subdivision under four different scenarios. The
4 fact that GCI's actual investment exceeds that predicted by the ACS 7.2
5 and HCPM models validates the point that the UNE rates produced by
6 those models do not overstate the appropriate TELRIC pricing.
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11 **17. Q. How does GCI's current cost of deploying loop plant compare to**
12 **estimates derived using the HCPM and the ACS proposed inputs?**
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14 **A.** As set forth in Mr. Wilks' testimony, GCI's actual Aurora Subdivision
15 investment was compared to an HCPM run using the ACS-proposed
16 inputs. Using those inputs, the HCPM estimated distribution and
17 concentrator investment at \$353,436, as compared to GCI's actual
18 investment of \$499,391. Thus, investment produced by the HCPM
19 model populated with ACS inputs was 71% of the true forward-looking
20 cost.
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1 A further comparison was made using a variation of the ACS 7.2
2 extrapolation methodology designed to develop the relationship between
3 distribution and concentrator investment and two variables: area
4 measured by square miles and lines. The Aurora Subdivision has 389
5 lines in 0.1511 square miles. Based on those variables, ACS 7.2
6 estimated \$373,756 of distribution and concentrator investment for that
7 subdivision, or 75% of GCI's actual costs. Compared to the \$499,391
8 that it actually cost GCI to provision Aurora, this result clearly indicates
9 that ACS 7.2 does not overestimate the forward-looking costs of an
10 efficient carrier using currently available technology.
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16 18. Q. Can you estimate a forward-looking loop cost for Anchorage from
17 GCI's experience at the Aurora Subdivision?
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19 A. Yes. Under another one of the scenarios detailed in Mr. Wilks'
20 testimony, GCI's actual Aurora Subdivision costs were compared to the
21 results of the HCPM model using the inputs that were approved in the
22 Fairbanks-Juneau proceeding and used in calculating the current interim
23 UNE loop rate of \$14.92. That run of the HCPM model placed plant at
24 \$318,207, or 64% of GCI's actual costs. If the investment predicted by
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1 the model and inputs that yielded the \$14.92 rate is 64% of the true cost
2 to provision distribution and concentrator plant at Aurora, it follows than
3 that the \$14.92 rate result from that model is only 64% of the true
4 forward-looking loop rate. Thus, GCI's experience in Aurora implies
5 that true forward-looking loop cost in Anchorage is \$23.31 ($\$14.92/64$).
6 This result much more closely approximates the loop rate of \$25.88
7 proposed by ACS in this proceeding.
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1 19. Q. GCI has announced that it plans to transfer 60,000 loops to its cable
2 telephony network over the next three years. Has GCI released any
3 cost information that would allow for the estimation of its expected
4 cost to deploy cable telephony?
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7 A. GCI has not released any detailed cost estimates, but they have released
8 certain information that allows us to make some comparisons. In their
9 2nd Quarter 2003 Financial Release Conference Call (July 31, 2003),
10 GCI officials reported that it would require \$750 in incremental
11 investment per home to provision cable telephony. Adjusting for the
12 estimated number of lines per home (1.3) provided by GCI and using a
13 conservative estimate of an aggregate Annual Cost Factor (ACF) of 40%,
14 the monthly deployment cost is \$19.23.⁷ It is important to note that this
15 represents the monthly cost of just the incremental investment required to
16 allow the existing fiber/coaxial cable network and circuit switch
17 equipment to handle telephone service. Any allocation of the jointly
18 used cable will increase this cost.⁸ Adding \$7.46 per line as a
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25 ⁷ These calculations are shown on Exhibit DCB-7.

26 ⁸ GCI's fiber/coaxial cable will presumably be used by GCI's cable, telephone, and data operations.

conservative allocation (1/2 of the current \$14.92 UNE loop rate)⁹ of the cost of the cable facility that will be used to carry cable telephony traffic, it follows then that, consistent with the Aurora example, the cost to GCI of building loop plant is in excess of \$25 per loop per month ($\$19.43 + \$7.46 = \26.89). Since GCI has announced plans to build its cable telephony network, we must assume that it believes that this technology is more cost effective than traditional copper/fiber telephone plant.¹⁰ Nonetheless, GCI appears only willing to pay less than \$15 a month to lease ACS's loops.

Asymmetric Regulation, Market Dominance, and the Appropriate UNE Loop

Rate

20. Q. Describe how ACS and GCI are regulated as telecommunications providers.

A. ACS is regulated as a dominant carrier by both the Federal Communications Commission (FCC) and the Regulatory Commission of

⁹ If \$14.92 is what GCI believes the loop rate is, and if two services (telephone and cable) are sharing that loop, a reasonable allocation of the loop would be 1/2 or \$7.46 to each service.

1 Alaska (RCA). Dominant carrier regulation requires, among other
2 things, that tariffs be filed, that the tariffs be cost-based, and that the
3 network be opened to competitive providers and the prices for network
4 elements be provided at wholesale TELRIC rates. Dominant carriers are
5 required to maintain and routinely file extensive financial and statistical
6 information regarding their accounting practices and their affiliate
7 relationships, as well as network and service quality information. The
8 FCC's Title II dominant carrier regulation places numerous restrictions
9 on carriers' exercise of market power. First, dominant carriers must
10 provide service to all creditworthy customers on reasonable request.
11 Second, dominant carriers can only impose just and reasonable charges,
12 terms, and conditions for their services and cannot engage in unjust or
13 unreasonable discrimination. Third, dominant carriers can only offer
14 services on a tariffed basis, and any changes to established services or to
15 charges, terms, or conditions for service can only take effect after ninety-
16 day advance notice to the Commission and the public. Fourth, dominant
17 carriers are vulnerable to having their tariffs suspended for as many as
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25 10 Savings will also be generated by carrying both cable and telephone signals across the same cable
26 facility plant. Because GCI is not regulated based on cost in either the cable or telephone businesses,
these cost savings are not likely to be reflected in rate reductions to consumers.

1 five months by the Commission on its own initiative or pursuant to
2 complaints filed by members of the public, pending investigation into
3 their legality. Fifth, when dominant carriers commit statutory violations,
4 the Commission has jurisdiction to prescribe just and reasonable charges,
5 terms, and conditions for their services, to issue cease and desist orders
6 against them, and to award damages against them. Finally, dominant
7 carriers cannot construct, acquire, or operate any facilities or
8 "discontinue, reduce, or impair" their services without Commission
9 authorization.¹¹
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15 21. Q. Please describe GCI's status as "non-dominant carrier."

16 A. GCI, by contrast, is treated as a non-dominant carrier. The FCC basically
17 takes a "hands off" or forbearance approach to non-dominant
18 telecommunications carriers, maintaining only its enforcement
19 regulations to correct clear and blatant offenses. In the state jurisdiction,
20 GCI faces little regulatory scrutiny beyond the requirement of filing
21 tariffs, and it is not required to support prices with economic information
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25 ¹¹ S. Schoenwald, Regulating Competition in the Interexchange Telecommunications Market: The
26 Dominant/Nondominant Carrier Approach and the Evolution of Forbearance, at. 11. See also 47
U.S.C. Sections 201-214

1 or open its networks to competitors. Carriers are considered non-
2 dominant on the basis that: 1) they do not have sufficient market power
3 to harm consumer welfare, or 2) they are new entrants to a market
4 recently opened to competition.
5

6
7
8 **22. Q. Please explain how this disparate regulatory treatment impacts local**
9 **exchange carriers.**

10 **A.** Dominant/non-dominant regulatory treatment, or asymmetric regulation,
11 imposes a series of regulations on the dominant firm that ostensibly
12 constrain its ability to engage in practices that would hamper the new
13 market entrant, while at the same time providing a "rule-free"
14 environment for the entrant. Asymmetric regulation has been routinely
15 employed by the FCC in paving the way for entry in markets moving
16 from largely monopolistic to competitive environments.
17

18
19 The difference between the regulatory treatment of incumbents and
20 CLECs in the 1996 Act is a clear example of asymmetric regulation.
21 Under the terms of the Act ILECs are considered dominant and are
22 required to offer access to unbundled network elements at prices based
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1 on TELRIC, while CLECs face no such requirement. Asymmetric
2 regulation reduces the market share of the dominant firm at an
3 accelerated pace by the application of regulatory, not market, conditions.
4 One question likely to be addressed in the upcoming FCC proceeding is:
5 when should a competitor no longer be considered a "new entrant" and
6 lose the advantages that come from unequal regulatory treatment?
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11 23. Q. Why is asymmetric regulation unnecessary or inappropriate in
12 ACS's case?

13 A. While asymmetric regulation allows the entry of fringe entrants into a
14 market, in the case of Anchorage, the need for such regulation is long
15 past. First, given the success of GCI's competitive penetration into the
16 Anchorage market, ACS is no longer in a position to exploit market
17 power. Second, a competitor with over 44% market share that is
18 increasing that market share each month¹² can hardly be said to be
19 facing financial barriers to entry, nor can it be characterized as a new
20 entrant requiring regulatory protection.
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¹² GCI has added an average of 442 UNE loops for the first seven months of 2003.

1 24. Q. Based on current market conditions should ACS-ANC be considered
2 a dominant carrier?
3

4 A. No. By any measure of market power, ACS is a non-dominant carrier.
5 ACS has lost 50% of the retail market in just over five years. Its main
6 competitor, GCI, is a multi-product firm that is integrated both
7 horizontally and vertically. It has network capacity both through its long
8 distance and cable affiliates, has effectively become a price leader in the
9 local telephony market through its service bundling capabilities, and has
10 the ability to pick and choose when it will self-supply or procure loops
11 from ACS. GCI is larger than ACS, having a market capitalization of
12 \$473 million compared to ACS's market capitalization of \$131
13 million.¹³
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19 25. Q. By what criteria has the FCC determined market dominance?

20 A. FCC rules define a dominant carrier as a carrier possessing market
21 power, and a non-dominant carrier as a carrier not found to be dominant.
22 The FCC has traditionally considered four factors in determining
23 whether a firm possesses market power. These are:
24
25

26 ¹³ Market Capitalization figures from Yahoo Finance, August 13, 2003.

- 1) market share and changes to market share
- 2) demand elasticity
- 3) supply elasticity
- 4) cost and size disparity

In its determination of market power, the FCC also considers the relevant product market. A set of services represents a distinct product market if a hypothetical monopoly provider of those services could profitably sustain a nontransitory, nontrivial price increase.¹⁴ In addition, the FCC has also considered whether a firm classified as dominant that lacks market power in the provision of certain services could quickly acquire market power over those services through discrimination, cross-subsidization, or price squeeze.

26. Q. Are there any fairly recent examples of where a formerly dominant telecommunications carrier has been determined to be non-dominant?

A. In 1995, more than ten years after the Bell System divestiture, AT&T was designated a non-dominant carrier in the domestic residential

1 interexchange market. AT&T had previously been designated a non-
2 dominant carrier for the domestic business interexchange market. The
3
4 FCC relied primarily on loss of market share and reduction in interstate
5 long distance rates. By 1995, AT&T had less than 60% of the long
6 distance minutes and revenues, and interstate toll rates were less than
7 \$0.10/minute. AT&T's two major competitors, Sprint and MCI, had not
8 only captured significant levels of customers, but also had constructed
9 large networks that provided an excess of network capacity.
10 Interestingly, Judge Greene found that AT&T lacked market power even
11 though it had a large market share.¹⁵ His reasoning was based on the
12 fact that AT&T, following divestiture, no longer controlled any
13 "bottleneck" facilities, a key determinant in the FCC's definition of
14 dominance.¹⁶

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20 27. Q. Are you advocating that the RCA eliminate the TELRIC pricing
21 requirement for UNEs in this proceeding?
22

23 ¹⁴ R. Crandall, J. Sidak, and H. Singer, The Empirical Case Against Asymmetric Regulation of
24 Broadband Internet Access.

25 ¹⁵ United States v. AT&T, 552 F. Supp. at 171-72.

26 ¹⁶ The ability to purchase UNE as well as cable telephony deployment eliminates any bottlenecks remaining to ACS in local service.

1 A. No, I am not. While I believe that ACS should be declared non-
2 dominant in Anchorage by the Commission, I am proposing that this
3 Commission consider the implications of continuing to mandate a UNE
4 rate that provides GCI with the ability to earn windfall profits in a market
5 where the conditions that the TELRIC pricing standard was established
6 to address -- facilitating new entrance into the local telephone market and
7 eliminating financial barriers to entry -- are no longer relevant.¹⁷
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12 28. Q. What are the implications of maintaining an inappropriately low
13 UNE loop rate in a market with an established, financially strong
14 competitor?
15

16 A. At its current level, the UNE loop rate has the dual effect of depriving
17 ACS of badly needed revenue while at the same time providing GCI with
18 a financial windfall. If the UNE rate had been set at \$24.92 instead of
19 the current \$14.92 (or the previous rate of \$13.85), ACS would have
20 realized additional revenues of \$24.3 million from September 1997
21 through March 2003, while GCI would have seen revenues reduced by a
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25 ¹⁷ An alternative would be to require reciprocity on the part of GCI, whereby ACS would
26 have the ability to lease GCI's facilities at the same price that GCI leases ACS's facilities. This
alternative would only be sustainable if the rate was set in a way to allow both GCI and ACS to
recover their respective investments.

1 like amount.¹⁸ As Exhibit DCB-3 shows, the additional revenue in 2002
2 would represent 87% of the total amount actually spent by ACS on
3 regulated plant maintenance in that year. Exhibit DCB-3 also shows how
4 this revenue may have been used to bring maintenance expense to
5 investment ratios closer to industry averages.
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9 **29. Q. The unreasonably low UNE loop rate has dramatically reduced the**
10 **revenue available to ACS to maintain the Anchorage plant. How has**
11 **it impacted GCI?**
12

13 **A.** While the unreasonably low UNE loop rate has dramatically reduced the
14 revenue available to ACS to maintain the Anchorage plant, it has also
15 provided GCI with a windfall. As shown on Exhibit DCB-4, by paying
16 \$14.92 for a loop, GCI has access to average revenues of \$46.42 per
17 residential customer and \$58.59 per business customer. To estimate the
18 potential margin GCI is receiving from the UNE loop rate, I have added
19 amounts representative of GCI's switching, transport, and retail costs to
20 the \$14.92 UNE loop rate. As a conservative estimate, I am adding
21 \$12.82 to the \$14.92 UNE loop rate to represent GCI's costs over and
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26 ¹⁸ This analysis is shown on Exhibit DCB-2. In the interim period between April through August of

1 above the loop.¹⁹ Thus, potential revenues over and above \$27.74 for
2 each loop represent the net revenue GCI receives for a switched loop. As
3 shown on Exhibit DCB-4, GCI receives a potential margin of 125% for
4 each residential loop and 207% for each business loop. Even if the UNE
5 loop were increased by \$10 to \$24.92, GCI's margins would still remain
6 35% for each residential loop and 84% for each business loop.²⁰ Exhibit
7 DCB-5 shows the cumulative effect of this windfall since GCI began
8 taking UNE loops in 1997. The inappropriately low UNE loop rate
9 (\$13.85 through October of 2001 and \$14.92 since) has provided GCI
10 with an estimated potential margin of over \$58 million.²¹ Thus, while a
11 higher UNE rate would have allowed ACS to increase plant maintenance
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18 this year, the revenue loss to ACS has increased by more than \$2.5 million.

19 ¹⁹ I believe that this estimate is excessive and will understate the extent of GCI's windfall, yet I use it
20 to calculate a conservative estimate of the financial benefit GCI derives from the current UNE loop
21 rate. The \$12.82 estimate is taken from GCI employee Rick Hitz's May 5, 2003, affidavit filed in the
22 federal Universal Service proceeding. Mr. Hitz estimates that it takes \$12.82 per loop to account for
23 the "sunk expenditures for collocation, switch procurement and deployment and fiber transport
24 facilities from GCI's collocation site" at ACS end offices "to its switch." While Mr. Hitz is arguing
25 that these costs be included in GCI's loop costs in Fairbanks, the functions and equipment he lists are
26 those generally associated with switching and transport.

²⁰ GCI's margin on UNE loops may also be understated here on loops used by GCI to serve multiple
access lines.

²¹ The \$58 million aggregate margin will vary depending upon the actual level of non-loop related
costs incurred by GCI, as well as any discount to the ACS retail price GCI offers its retail customers.

1 spending, the lower UNE rate has allowed GCI to earn significant
2 windfall profits.
3

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5 A consumer benefit argument could have been made if GCI had used this
6 windfall to invest in its local service operations. Yet as the transcript of
7 its 2nd Quarter 2003 Financial Release Conference Call indicates, only a
8 “mere \$175,000” out of a total investment of \$10.9 million was invested
9 in local telephone service in the 2nd quarter. In addition to the small
10 amount invested in local service, \$3.9 million was invested in long
11 distance, \$4 million in cable and entertainment, \$600,000 in Internet
12 Access services, \$500,000 in improvements in the North Slope fiber, and
13 \$1.6 million in administrative support assets. The distribution of GCI’s
14 investments confirms that the inappropriately low UNE rate has allowed
15 GCI to forgo investment in local service.
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1 31. Q. What alternatives will ACS face if the inappropriately low UNE rate
2 is not increased?

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4 A. As discussed above, the inappropriately low UNE rate restricts ACS's
5 cash flow as well as its incentives to invest. The restriction of cash flow
6 will restrict ACS's ability to fund plant maintenance expenses as well as
7 infrastructure improvements. The impact of the cash flow restriction can
8 be seen in the year-over trend in plant maintenance expenditures made
9 by ACS. Exhibit DCB-6 shows that overall plant maintenance expenses
10 have dropped by 30% since 1998. This reduction in maintenance
11 expense, coupled with the reduced incentive to invest in plant
12 infrastructure, means that customers (including UNE customers) will not
13 see as many network enhancements and improvements. This will result
14 in a slower rollout of new technologies and services as well as a decline
15 in service quality, which in turn can only be viewed as harmful to public
16 welfare.
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- 1 32. Q. Can ACS realistically reduce investment and maintenance levels in a
2 market that has a strong competitor such as GCI?
3
- 4 A. The company will not have any other reasonable choice. It will not make
5 investments if it cannot expect to earn a reasonable return and fully
6 recover those investments. Nor can it be expected to fund maintenance
7 programs without the cash flow to support it. Based on its experience
8 with the debt restructure efforts and the fact that the company has never
9 paid a dividend, returning to the capital markets does not appear to be an
10 option if the company wants to maintain reasonable capital cost levels.
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- 15 33. Q. Assume ACS does reduce its investment. Isn't likely that GCI will
16 step in, thereby preventing any harm to consumers?
17
- 18 A. Certainly I would expect that GCI can, and will, step in. Its track record
19 of aggressive participation in the market as well as its public
20 announcements concerning the deployment of alternative technologies,
21 such as cable telephony, lead to the conclusion that they will be ready
22 and able to exploit a reduction in investment by ACS. However, this will
23 not mitigate the potential harm to consumers. Remember that ACS is
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1 still the Carrier of Last Resort, providing facilities to the least profitable
2 customers. Also, GCI uses ACS loops to connect to some of their retail
3 customers. Finally, ACS is still a price leader in the market, and as such,
4 acts as a restraint on GCI behavior just as GCI acts as a restraint on the
5 behavior of ACS.
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10 **34. Q. How would these effects lead to a decline in public welfare?**

11 **A.** Reduced investment and maintenance expenditures will result in a
12 reduction in service quality for both ACS and GCI customers and the
13 elimination of the consumer benefits of competition. For example, if
14 ACS service quality suffers, the pricing constraint on GCI will erode,
15 and GCI will be able to justify prices higher than ACS based on service
16 quality differences. Further, should ACS falter, GCI will see an erosion
17 of the restraint on its market behavior, specifically in pricing. The
18 reduction and possible eventual elimination of that restraint will result in
19 the reintroduction of a new monopoly era – one with GCI as the
20 dominant unregulated provider.
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1 35. Q. Doesn't the fact that local telephony markets are now open to
2 competition eliminate the chance that GCI could become the
3 dominant provider?
4

5 A. GCI owes much of its success to three factors. First, it was not a start-up
6 competitive local exchange carrier (CLEC). It was a well-established
7 entity as the largest cable monopoly and the primary interexchange
8 carrier (IXC) in the state. As such, it had existing relationships with
9 many of the customers in the market. Second, as an IXC entering the
10 local market, GCI could effectively eliminate the payment of access
11 charges on its long distance traffic that originates and terminates on its
12 local lines. The significance of this capability can be easily seen if one
13 considers that access charges represent the largest single cost incurred by
14 IXCs. These first two factors meant that GCI had the financial resources
15 and opportunity necessary to succeed in entering the local telephony
16 market. One only has to look at the vast number of bankrupt CLECs
17 elsewhere in the country to understand the importance of these factors to
18 GCI's success.
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1 The third factor in GCI's success is that it has been able to take
2 advantage of the UNE rules whereby it can lease ACS loops at a price
3 that is far below the level of revenue ACS would otherwise receive from
4 those loops. As a CLEC, GCI is not subject to the UNE rules that would
5 require it to lease its loops to any competitor. As a result, new
6 competitors do not have the luxury of taking advantage of the same tool
7 that GCI itself has used to become dominant in the Anchorage market.
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12 36. Q. You have discussed the negative impacts on public welfare of an
13 inappropriately low UNE rate. What are the impacts of a UNE loop
14 rate that is too high?
15

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17 A. UNE rates that exceed the true forward-looking cost will not the achieve
18 the purpose of the TELRIC pricing standard, that is, a UNE rate that is
19 too high will not eliminate the financial barrier of entry into the local
20 telephone market and will allow the incumbent to continue to exploit its
21 market power. Neither of these concerns apply in the present case. As
22 discussed above, GCI is not a new entrant. They have over 44% of the
23 Anchorage market with more lines added each month. In addition, they
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1 have 21% of the statewide market. ²² The above discussion shows that
2 GCI has both the financial resources relative to ACS and the client
3 relationships to remain a viable competitor regardless of the UNE loop
4 rate level. By the FCC's own criteria, ACS no longer enjoys a dominant
5 position in the Anchorage market. Finally, GCI is about to deploy cable
6 telephony technology. These factors all lead to the conclusion that an
7 increase in the UNE rate will not have a negative impact on the
8 competitive market in Anchorage.
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14 **37. Q. What are your recommendations concerning the appropriate UNE**
15 **loop rate in Anchorage?**

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17 **A.** The Commission's task in this proceeding is to determine the appropriate
18 UNE loop rate. The appropriate UNE loop rate is equal to the cost of
19 building new plant in Anchorage using the most efficient technology
20 currently available. The most effective method to determine which
21 party's proposal is closer to this point is to consider what it actually costs
22 both GCI and ACS to provision new loop plant today. Based on these
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26 ²² 2nd Quarter 2003 Financial Release Conference Call, at 4, July 31, 2003.

1 criteria, it is clear that the ACS proposal of \$25.88 is much more
2 representative of the true forward-looking cost.
3

4
5 The continuation of a UNE loop rate that is significantly below the true
6 forward-looking cost will eventually erode ACS's ability to function as a
7 viable competitor to GCI in the market. Without a viable competitor, we
8 are left with a market with a dominant carrier that is unregulated. This
9 outcome is simply not in the public interest. If the UNE rate is set higher
10 than what it would cost for GCI to build its own plant, GCI will simply
11 build it. As discussed above, GCI certainly has the financial wherewithal
12 and market presence to do just that.
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18 Finally, I believe that the Commission should take into consideration the
19 fact that ACS has been subject to an inappropriately low UNE loop rate
20 for almost 5 years. In that time this rate has reduced ACS's available
21 resources and provided GCI no-cost financing for many investment
22 projects – including cable telephony. This benefit is well beyond the
23 purpose of the TELRIC pricing rules and has lead to harm in not only the
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1 local telephony market but potentially also in the long distance and cable
2 markets as well. The windfall that GCI has received from the
3 inappropriately low UNE loop rate has allowed them to fund investment
4 projects outside of local service. Since September 1997, the UNE loop
5 rate has provided GCI with potential contribution of more than \$58
6 million.²³ This windfall has allowed the company to improve its
7 competitive position in the long distance and cable markets and limited
8 the necessity of GCI having to increase its debt load or dilute its equity
9 position.
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15 Development of the Cost of Capital Input in the ACS 7.2 Model

16 38. Q. Do the current UNE prices reflect the appropriate cost of capital for
17 ACS?

18 A. No. The current UNE rates do not reflect the level of risk faced by ACS.
19 The FCC and the RCA have provided us with some useful guidance in
20 determining the appropriate Weighted Average Cost of Capital (WACC).
21 In the Local Competition Order, the FCC specified that a WACC of
22 11.25% may be used to develop UNE rates. The 11.25% WACC was
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26 ²³ See Exhibit DCB-5.

1 based on a capital structure with 44.2% debt and a cost of debt of 8.8%.
2
3 However, the FCC allowed state Commissions to adjust this level to
4 account for the particular circumstances of an individual LEC. As
5 described in Appendix DCB-2, ACS's highly leveraged capital structure
6 (85%) and a cost of debt of 10.5% means that a WACC of 11.25% would
7 not sufficiently account for the risk facing the company. In addition, it
8 is anticipated that the FCC's Triennial Review Order will address the
9 cost of capital in a more competitive telecommunications marketplace
10 and increase the current default return of 11.25%.²⁴
11
12
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15 39. Q. What guidance has the RCA provided with regard to the
16 appropriate WACC?

17 A. The RCA recently adjudicated ACS's local revenue requirement in
18 Docket U-01-34. In RCA Order U-01-34(15), the Commission accepted
19 a stipulation between the parties that resulted in a WACC of 11.16%.²⁵
20

21 The stipulation contained the following components:
22

23
24 ²⁴ The FCC's July 20, 2003, Press Release, FCC Adopts Rules for Network Unbundling Obligations
25 of Incumbent Local Phone Carriers, stated the following: "First, the order clarifies that the risk
26 adjusted cost of capital used in calculating UNE prices should reflect the risks associated with a
competitive market."

²⁵ See Schedule No. 34 in Stipulation Document.

Table F

Cost of Capital Stipulation: U-01-34

	Ratio	Cost	Weighted Cost
Debt	45%	8.6%	3.87%
Equity	55%	13.25%	7.29%
WACC			11.16%

Per the FCC's instructions, an adjustment must be made to the cost of equity. I would propose that a 200 basis point risk premium be added to the cost of equity.²⁶ As shown in Table G below, making this adjustment results in a WACC of 12.26%.

Table G

Cost of Capital Stipulation: U-01-34 with Risk Premium Adjustment

	Ratio	Cost	Weighted Cost
Debt	45%	8.6%	3.87%
Equity	55%	15.25%	8.39%
WACC			12.26%

²⁶ In CC Docket No. 87-313, the FCC added 200 basis points to the allowed interstate return to reflect the increased risk accepted by LECs which adopted a 4.3% productivity offset. Second Report and Order, CC Docket No. 87-313, at para.s 120-26, released October 4, 1990. In this order, the FCC allowed price cap LECs that adopted a 4.3% productivity offset to keep earnings up to 13.25% before earnings sharing commenced. At earnings levels between 13.25% and 17.25%, carriers were allowed to keep 50% of earnings in this range. Under this rule, carriers were allowed a maximum return of 15.25%. Thus, compared with a rate of return carrier's maximum return of 11.25%, this represents a risk premium of between 200 to 400 basis points.

1 40. Q. Have you attempted to validate whether a WACC of 12.26% is still
2 relevant to ACS?

3
4 A. Yes. We have updated a cost of capital analysis for ACS using its current
5 capital structure, cost of debt, and most recent data available. The results
6 of this analysis, summarized in Table H below, are discussed in more
7 detail in Exhibit DCB-2.²⁷
8

9 Table H
10 Empirical Cost of Capital Estimation

	Ratio	Cost	Weighted Cost
Debt	83.53%	10.33%	8.63%
Equity	16.47%	25.05%	4.12%
WACC			12.75%

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16 While the capital structure and capital cost components are different
17 from that found in the stipulation adjusted for increased risk, the overall
18 WACC is very consistent (12.75% vs. 12.26%).
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26 ²⁷ ACS recently announced a major debt restructure initiative.

Source: 2002 ACS of Anchorage, Inc Form M, 2002 ACS of Anchorage, Inc. Part 38

SUMMARY:

<u>Avoided Costs:</u>	
<u>Direct Expenses</u>	
1	Network Support Expenses \$0 [In 68c]
2	Maintenance Expenses - [In 74c]
3	Access Expenses - [In 109c]
4	Depreciation (Direct) Expenses - [In 107c]
5	Marketing Expenses 143,655 [In 113c]
6	Services Expenses 1,248,284 [In 117c]
<u>Indirect Expenses</u>	
7	General Support Expenses 704,959 [In 121c]
8	Depreciation (Indirect) Expenses 27,866 [In 127c]
9	Corporate Operations Expenses 556,569 [In 128c]
10	Return/Taxes on GSF Investment 116,169 [In 128c]
11	Uncollectibles 105,300 [In 143c]
12	Total Avoided Costs \$2,908,501 [In 1 .. In 12]
<u>Revenue Base for Wholesale Discount:</u>	
13	5000 Basic Local Service Revenue \$28,057,152 (In 14 .. In 17)
14	5001 Basic Area Service \$28,057,152 2002 Form M
15	5002 Optional Extended Area Revenue \$0 2002 Form M
16	5003 Cellular Mobile Service Revenue \$0 2002 Form M
17	5004 Other Mobile Service Revenue \$0 2002 Form M
18	5010 Local Network Services Revenue \$20,089,470 (In 19 .. In 23)
19	5010 Public Telephone Revenue \$0 2002 Form M
20	5040 Local Private Line Revenue \$8,679,386 2002 Form M
21	5050 Customer Premises Revenue \$0 2002 Form M
22	5060 Other Local Service \$11,409,504 2002 Form M
23	5069 Other Local Exchange Revenue Settlements \$0 2002 Form M
24	5080 Network Access Services Revenue \$43,188,187 (In 25 .. In 28)
25	5081 End User Revenue Settlements \$9,670,284 2002 Form M
26	5082 Switched Access Revenue \$16,790,348 2002 Form M
27	5083 Special Access Revenue \$6,213,413 2002 Form M
28	5084 State Access Revenue \$10,514,162 2002 Form M
29	5100 Long Distance Network Services Revenues \$0 (In 30 .. In 33)
30	5100 Long Distance Message Revenue \$0 2002 Form M
31	5111 Long Distance Inward-Only Revenue \$0 2002 Form M
32	5112 Long Distance Outward-Only Revenue \$0 2002 Form M
33	5110 Total Unidirectional Long Distance Revenue \$0 2002 Form M
34	5120 Long Distance Message Revenue \$0 (In 34 .. In 42)
34	5121 Subvoice Grade Long Distance Private Network Revenue \$0 2002 Form M
35	5122 Voice Program Grade Long Distance Private Network Revenue \$0 2002 Form M
36	5123 Audio Program Grade Long Distance Private Network Revenue \$0 2002 Form M
37	5124 Video Program Grade Long Distance Private Network Revenue \$0 2002 Form M
38	5125 Digital Transmission Long Distance Private Network Revenue \$0 2002 Form M
39	5126 Long Distance Private Network Switching Revenue \$0 2002 Form M
40	5123 Other Long Distance Private Network Revenue \$0 2002 Form M
41	5129 Other Long Distance Private Network Revenue Settlements \$0 2002 Form M
42	5120 Total Long Distance Private Network Revenue \$0 2002 Form M
43	5160 Other Long Distance Revenue \$419,167 2002 Form M
44	5169 Other Long Distance Network Services Revenues \$0 2002 Form M
45	5260 Miscellaneous Revenues \$13,931,933 (In 46 .. In 55)
46	5230 Directory Revenue \$727,593 2002 Form M
47	5240 Rent Revenue \$11,587,560 2002 Form M
48	5250 Corporate Operations Revenue \$0 2002 Form M
49	5261 Special Billing Arrangement Revenue \$978 2002 Form M
50	5262 Customer Operations Revenue \$0 2002 Form M
51	5263 Plant Operations Revenue \$0 2002 Form M
52	5264 Other Incidental Regulated Revenue (\$473,818) 2002 Form M
53	5269 Other Revenue Settlements \$0 2002 Form M
54	5270 Carrier Billing and Collection \$2,089,620 2002 Form M
55	5280 Nonregulated Operating Revenue \$0 2002 Form M
56	Net Operating Revenues \$105,684,909 [In 12 + In 18 + In 24 + In 34 + In 43 + In 44 + In 45]
57	plus Uncollectibles (\$1,607,224) 2002 Form M
58	Total Revenues plus Uncollectibles \$104,077,685 [In 56 - In 57]
59	less Network Access Revenues \$43,188,187 (In 24)
60	less Miscellaneous Revenues \$13,931,933 (In 45)
61	less Long Distance Network Revenues \$14,351,100 [In 29 + In 34 + In 43 + In 44 + In 46]
62	less non-service order NRC Revenues \$0
63	less Public Telephone Revenues \$0 (In 19)
64	Revenue Base for Wholesale Discount \$32,606,465 [In 58 - In 64]
65	
66	
67	<u>Percent Avoided Costs</u>
(Calculated to represent the discount rate applicable to retail prices in conformance with the Telecommunications Act of 1996.)	
8.91% [In 12 + In 65]	

		Dollars				
Acct	Description	Total Operating Expenses (a)	Total Operating Source (b)	Local Operating Expenses (c)	Local Operating Source (Col A+B+C)	Avoided Retail Percent (d)=(c)/(a)(b)
66	6110 Network Support Expenses	\$853,368	(In 68, In 73)	\$444,319	Part 36	0.0000%
69	6112 Motor Vehicles	\$103,104	Form M Schedule I-1			\$0
70	6113 Aircraft	\$519,031	Form M Schedule I-1			\$0
71	6114 Special Purpose Vehicles	\$32	Form M Schedule I-1			\$0
72	6115 Garage and Work Equipment	\$5,077	Form M Schedule I-1			\$0
73	6116 Other Work Equipment	\$29,124	Form M Schedule I-1			\$0
74	Maintenance Expenses	\$14,301,997	(In 75+78+82+87+97+100)	\$10,112,208	(In 75+82+87+97+100)	\$0
75	6210 Central Office Switching	\$1,128,504	(In 76+In 77)	\$2,048,324	Part 36	0.0000%
76	6211 Analog Electronic Switching	\$0	Form M Schedule I-1			\$0
77	6212 Digital Electronic Switching	\$1,128,504	Form M Schedule I-1			\$0
78	6230 Central Office Transmission	\$1,845,228	(In 79, In 81)			0.0000%
79	6220 Operator Systems	\$18,272	Form M Schedule I-1			\$0
80	6231 Radio Systems Expense	\$59,636	Form M Schedule I-1			\$0
81	6232 Circuit Equipment Expense	\$1,567,318	Form M Schedule I-1			\$0
82	6310 Information Orig/Term Expenses	\$53,607	(In 83, In 86)	\$0	Part 36	0.0000%
83	6311 Station Apparatus	\$30,873	Form M Schedule I-1			\$0
84	6341 Large Private Branch Exchange Expense	\$13,934	Form M Schedule I-1			\$0
85	6351 Public Telephone Equipment	\$0	Form M Schedule I-1			\$0
86	6362 Other Terminal Equipment	\$0	Form M Schedule I-1			\$0
87	6410 Cable and Wire Facilities	\$4,779,313	(In 88, In 96)	\$1,280,430	Part 36	0.0000%
88	6411 Pole Expense	\$303,969	Form M Schedule I-1			\$0
89	6421 Aerial Cable Expense	\$791,932	Form M Schedule I-1			\$0
90	6422 Underground Cable Expense	\$110,734	Form M Schedule I-1			\$0
91	6423 Buried Cable Expense	\$3,542,554	Form M Schedule I-1			\$0
92	6424 Submarine Cable Expense	\$0	Form M Schedule I-1			\$0
93	6425 Deep Sea Cable Expense	\$0	Form M Schedule I-1			\$0
94	6426 Intra-building Network Cable Expense	\$21,114	Form M Schedule I-1			\$0
95	6431 Aerial Wire	\$111	Form M Schedule I-1			\$0
96	6441 Conduit Systems Expense	\$5,899	Form M Schedule I-1			\$0
97	6510 Other P&E Expenses	\$69,848	(In 98+In 99)	\$49,349		0.0000%
98	6511 Property Held for Future Use	\$0	Form M Schedule I-1			\$0
99	6512 Provisioning	\$69,848	Form M Schedule I-1			\$0
100	6530 Network Operations Expense	\$6,828,467	(In 101, In 105)	\$4,733,305		\$0
101	6531 Power	\$637,026	Form M Schedule I-1			\$0
102	6532 Network Administration	\$1,124,068	Form M Schedule I-1			\$0
103	6533 Testing	\$1,332,032	Form M Schedule I-1			\$0
104	6534 Plant Operations Administration	\$2,048,910	Form M Schedule I-1			\$0
105	6535 Engineering	\$885,531	Form M Schedule I-1			\$0
106	6540 Access Expenses	\$1,984,814	Form M Schedule I-1	\$1,448,531	Part 36	0.0000%
107	Depreciation Expenses (Direct)	\$29,464,093	(In 108, In 112)	\$21,078,507	(In 108, In 112)	\$0
108	6581 Depreciation Expense - Telecom Partners Service	\$29,351,643	Form M Schedule I-1	\$23,988,578	Part 36	0.0000%
109	6582 Property Held for Future Use	\$0	Form M Schedule I-1	\$0	Part 36	\$0
110	6583 Amortization - Tangibles	\$112,450	Form M Schedule I-1	\$79,829	Part 36	\$0
111	6584 Amortization - Intangibles	\$0	Form M Schedule I-1	\$0	Part 36	\$0
112	6585 Amortization - Other	\$0	Form M Schedule I-1	\$0	Part 36	\$0
113	Marketing Expenses	\$3,191,829	(In 114, In 118)	\$2,188,708	(In 114, In 118)	\$143,865
114	6811 Product Management	\$209,873	Form M Schedule I-1	\$143,365		\$143,855
115	6812 Sales	\$2,418,257	Form M Schedule I-1	\$1,698,439		\$0
116	6813 Product Advertising	\$563,699	Form M Schedule I-1	\$388,911		\$0
117	Services Expenses	\$10,102,818	(In 118, In 120)	\$1,943,289	(In 118, In 120)	\$1,248,294
118	6821 Call Completion Services	\$411	Form M Schedule I-1	\$0	Part 36	\$0
119	6822 Number Services	\$3,378,487	Form M Schedule I-1	\$1,348,817	Part 36	\$0
120	6823 Customer Services	\$6,723,710	Form M Schedule I-1	\$1,648,371	Part 36	\$1,248,284
121	General Support Expenses	\$15,266,171	(In 122, In 125)	\$11,829,374	Part 36	8.5517%
122	6121 Land and Buildings	\$4,888,273	Form M Schedule I-1			\$708,968
123	6122 Furniture and Attire	\$133,559	Form M Schedule I-1			
124	6123 Office Equipment	\$1,980,791	Form M Schedule I-1			
125	6124 General Purpose Computers	\$8,485,548	Form M Schedule I-1			
126	Depreciation Expenses (Indirect)			\$425,329	Part 36	8.5517%
127	6581 General Support Assets	\$518,201	Part 36	\$1,757,842	(GSF Return Spreadsheet)	\$27,868
128	Return/Taxes on GSF Investment					\$115,169
129	Corporate Operations Expenses	\$12,305,022	(In 130+133+142)	\$1,485,338	Part 36	\$559,569
130	6710 Executive and Planning	\$2,056,197	(In 131 + In 132)	\$1,388,268	Part 36	\$81,221
131	6711 Executive	\$1,971,543	Form M Schedule I-1			
132	6712 Planning	\$84,654	Form M Schedule I-1			
133	6720 General and Administrative	\$10,248,825	(In 134, In 141)	\$7,102,712	Part 36	\$485,348
134	6721 Accounting and Finance	\$2,612,017	Form M Schedule I-1			
135	6722 External Relations	\$1,281,282	Form M Schedule I-1			
136	6723 Human Resources	\$1,329,264	Form M Schedule I-1			
137	6724 Information Management	\$2,876,043	Form M Schedule I-1			
138	6725 Legal	\$1,173,550	Form M Schedule I-1			
139	6726 Procurement	\$170,864	Form M Schedule I-1			
140	6727 Research and Development	\$0	Form M Schedule I-1			
141	6728 Other General and Admin	\$805,805	Form M Schedule I-1			
142	6730 Provision for Uncollected Rec	\$0	Form M Schedule I-1	\$0		\$0
143	5300 Uncollectibles	\$1,607,224	(In 144 + In 145)	\$1,607,224	Part 36	8.5517%
144	5301 Uncollectibles - Telecommunications	\$1,607,224	Form M Schedule I-1	\$1,607,224	Part 36	8.5517%
145	5302 Uncollectibles - Other	\$0	Form M Schedule I-1			\$0

		Dollars				
Acct	Description	Total Operating Expenses	Total Operating Source	Local Operating Expenses	Local Operating Source (Col A+B+C)	Avoided Retail Percent
		(a)	(f)			(b)
146	Avoided Network Support Expenses					\$0 [n 89c]
147	Avoided Maintenance Expenses					\$0 [n 74c]
148	Avoided Access Expenses					\$0 [n 106c]
149	Avoided Depreciation (Direct) Expenses					\$0 [n 107c]
150	Avoided Marketing Expenses					\$143,865 [n 113c]
151	Avoided Services Expenses					\$1,248,284 [n 117c]
152	Total Avoided Direct Expenses					\$1,391,538 [n 148 .. in 151]
153	Total Network Support Expenses		Total Operating	\$853,365	Local Portion Tot Exp	\$484,519 [n 88]
154	Total General Support Expenses			\$15,298,171		\$0 [n 121]
155	Total Maintenance Expenses			\$14,301,967		\$10,112,208 [n 74]
156	Total Access Expenses			\$1,984,814		\$1,486,631 [n 106]
157	Total Depreciation Expenses			\$21,484,063		\$21,078,507 [n 107]
158	Total Marketing Expenses			\$3,191,629		\$2,186,706 [n 113]
159	Total Services Expenses			\$10,102,618		\$6,993,269 [n 117]
160	Total Corporate Operations Expenses			\$12,305,022		\$8,495,038 [n 129]
161	Total Operating Expenses			\$87,248,712		\$51,638,871 [n 153 .. in 160]
162	Avoided Share of Indirect Expenses					6.5517% [n 152 (b) - in 151(b)]